

REMARKS

Request for Personal Interview

Applicant again respectfully requests an in-person interview to discuss the present claims in view of the cited art and formal questions. Should the Examiner pick up this case prior to the scheduling of such an interview, the Examiner is respectfully requested to contact the undersigned at 503-495-4575 to arrange a mutually convenient interview time.

Claim Status

Claims 25, 26, 29 and 32-51 remain pending in the present application. Claim 25 has been amended in an editorial manner and without prejudice.

Formal Rejections

Claims Rejected Under 35 U.S.C. § 112, First Paragraph

Claim 25

Claim 25 is amended in a non-prejudicial manner, which in addition to broadening the claim, is believed to alleviate the outstanding formal rejection. Withdrawal of the outstanding formal rejection is respectfully requested.

(Applicant notes that “retrieving” embedded auxiliary information does not necessarily require removal of the auxiliary information from an embedded signal. In one example, on page 10, an auxiliary information retrieving process would “measure” a difference between peak levels to retrieve the auxiliary data. Thus, not all implementations “remove” embedded auxiliary data from a signal to read the embedded data. Of course, many other examples and techniques for reading auxiliary information – without removing the auxiliary information – will fall within the scope of this claim.)

Claim 29

Claim 29 is believed to be in a proper form. Favorable consideration is requested.

Claim 36

The features of claim 36 are believed to find ample support in the specification, e.g., for a data signal including the auxiliary information embedded therein during a compressing step. (See, e.g., the discussion above with respect to claim 25, where a “retrieving” process need not remove auxiliary information from a base signal.) Favorable reconsideration is requested.

Claims Rejected Under 35 U.S.C. § 112, Second Paragraph*Claim 25*

Applicant notes that the objected to language has been deleted from claim 25. (Such a deletion is believed to broaden the scope of claim 25.) Withdrawal of the rejection is respectfully requested.

Art Based Rejections

Applicant respectfully traverses the rejection of the pending claims as being unpatentable over Hartung, even when taken variously in view of Nakano (U.S. Patent No. 6,298,142), as set forth in the Office Action.

Applicant respectfully requests that the claims be revisited under a new claim interpretation in view of the above formal comments and the following remarks.

Hartung and NakanoClaim 25

Claim 25 relates to a method of embedding auxiliary information in data in which the auxiliary information is not lost with compression of the embedded data. The embedded data initially includes a non-compressed form including the auxiliary information embedded therein. The method includes a plurality of intertwined steps. For example, auxiliary information is retrieved from the non-compressed form of the embedded data; the non-compressed form of the embedded data is then compressed; and then the retrieved auxiliary information is embedded in the compressed embedded data. The compressed embedded data comprises the auxiliary information embedded therein.

Hartung is not understood to teach or suggest such an inventive combination.

Applicant notes with some curiosity the suggestion that Hartung teaches a combination of retrieving information from a non-compressed form, compressing the non-compressed form, and then embedding the retrieved information into the compressed form. While Hartung may teach some of these steps – individually – there is no suggestion or motivation to combine the steps as recited in claim 25.

Nakano does not remedy Hartung's deficiencies.

Accordingly, claim 25 should be allowed.

Claim 33

Claim 33 recites a method including retrieving auxiliary information from a data signal. The auxiliary information is encoded in the data signal. The auxiliary information is retrieved from the data signal while the data signal includes a non-compressed form; compressing the data signal, and the retrieved auxiliary information is embedded in the compressed data signal. The compressed data signal comprises the retrieved auxiliary information

Hartung discusses techniques for watermarking raw video and compressed video, but *Hartung does not contemplate the inter-relationship of the data in claim 33, e.g.,*

where auxiliary information is retrieved from a data signal, the data signal is then compressed, and then the retrieved auxiliary information is embedded into the compressed data signal.

Nakano is deficient with regard to the features (as well as the inter-relationship of the features) disclosed in claim 33.

Thus, claim 33 should be allowed.

Claim 40

Hartung and Nakano also fail to teach or suggest the features recited in claim 40. For example, the proposed combination of references fail to disclose retrieving auxiliary information from an original data signal, wherein the auxiliary information is encoded in the original data signal; *performing a transformation on the original data signal* to create a transformed data signal; and embedding the retrieved auxiliary information in the transformed data signal, wherein the transformed data comprises the retrieved auxiliary information.

Claim 40 should be similarly allowed.

Claim 26

Claim 26 stands rejected as being unpatentable over Hartung. Applicant respectfully traverses this rejection.

Claim 26 recites a method of embedding auxiliary information in data, wherein the auxiliary information is not lost with decompression of the data from a compressed form to a non-compressed form, and wherein the compressed form includes the auxiliary information. The method includes a unique combination of: i) retrieving the auxiliary information from the compressed form of the data; ii) decompressing the compressed form to yield the non-compressed form; and iii) steganographically embedding the auxiliary information in the non-compressed form whereby the non-compressed form of the data comprises the auxiliary information embedded therein.

Hartung is thus not understood to teach or suggest the combination of the claimed features. Here again, while Hartung may teach – individually – some of the above steps, it is not understood to teach or suggest the recited interrelationship of the steps as recited in claim 26.

Hence, claim 26 should be allowed.

Remaining Claims

The remaining claims recite many additional patentable combinations. Favorable consideration is requested.

Conclusion

Early passage to issuance is respectfully requested in view of the above amendments and remarks. (Other deficiencies of the cited art need not be belabored herein.).

We look forward to our upcoming interview.

Date: August 3, 2004

Respectfully submitted,

Customer No. 23735

DIGIMARC CORPORATION

Phone: 503-885-9699

FAX: 503-885-9880

By



Steven W. Stewart
Registration No. 45,133